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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,598	11/21/2003	Joel D. Oxman	59092US002	3112
27910	7590	12/12/2006	EXAMINER	
STINSON MORRISON HECKER LLP ATTN: PATENT GROUP 1201 WALNUT STREET, SUITE 2800 KANSAS CITY, MO 64106-2150			BERMAN, SUSAN W	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Advisory Action  
Before the Filing of an Appeal Brief**

Application No. 10/719,598		Applicant(s) OXMAN ET AL.	
Examiner Susan W. Berman		Art Unit 1711	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 15 November 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 24, 26, 28, 29, 32-36, 57 and 58.  
Claim(s) withdrawn from consideration: 1-23, 25, 27, 30, 31, 37-56 and 59.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attached pages.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☒ Other: IDS filed 04/05

Susan W Berman  
Primary Examiner  
Art Unit: 1711

***Response to Arguments***

Applicant's arguments filed 11-15-2006 have been fully considered but they are not persuasive.

The amendment to claim 57 merely recites a future intended use.

The Declaration of Joel D. Oxman submitted 11-15-2006 has been carefully considered.

It is not clear what Rule the Declaration is intended to be filed under.

The comparative data in the Declaration reported in Table I on page 3 is evidence that depth of cure is significantly improved when the combination of iodonium salt, camphorquinone and 2-ethyl-9,10-dimethoxy anthracene is employed in the tested filled epoxy resin composition. The tested compositions in Table I comprise a silicon containing epoxy and a substantial amount of silica as filler. The showing of unexpected results is considered to overcome the rejection of claims as being obvious over the cited prior art wherein the visible light sensitizer is an alpha diketone, such as camphorquinone. However, there is no comparative data with respect to the xanthene, fluorone or fluorescein dyes that are also taught in the prior art. There is no comparative data with respect to compositions comprising oxetanes, vinyl ethers or spiro-orthocarbonate resins as cationically polymerizable material. While oxetane compounds would be expected to polymerize in a similar fashion to epoxy compounds, it is not clear whether the same results would be clearly expected from vinyl ethers or spiro-orthocarbonates. The examiner has not found any specific disclosure of spiro-orthocarbonate materials within the specification. There is no showing that an improved depth of cure is obtained in compositions that are not highly filled. Therefor, the instant claims, which recite the specified dyes as visible light sensitizers in addition to alpha-diketones and do not recite a filler such as silica or silanized

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quartz and do not specify the kind of cationic polymerizable resin, are not considered to be commensurate in scope with the showing provided.

The comparative data in the instant Specification has also been considered. All tested compositions comprise a silicon containing epoxy resin, iodonium salt and camphorquinone. Table 1B shows improved cure speed for unfilled compositions Ex. 1-16 compared with compositions containing anthracene alone or TMOB (a trimethoxybenzene) or “EDMAB” (a diamino benzoate, on steel but not on polyester). There is no improvement shown when compared with the same compositions containing “DMA”, “MA” or “EA” as anthracene. The instant claims are not commensurate in scope with this showing for the reasons given above with respect to visible light sensitizer and cationic polymerizable resin. Table 2 (page 33) shows improved cure depth for filled compositions with “EDMOA” alone or with anthracene, except for Ex 4 which shows that the concentration ratio of “EDMOA” to anthracene is critical. Table 4 Example 19R shows an improvement in cure depth for filled compositions when “EDMOA” is used with anthracene compared with either “EDMOA” alone or anthracene alone. Table 5 (page 37) shows greater cure speed for the compositions with filler added when “EDMOA” alone or with anthracene is compared with anthracene alone. The comments above with respect to the scope of the claims commensurate with the showings apply.

Recombination of the claims withdrawn from consideration as being drawn to non-elected species will be considered upon amendment of the claims to be commensurate in scope with the comparative data or the presentation of additional comparative data to support the scope of the claims.


It is suggested that applicant might amend the claims to include the description of extinction coefficient on page 17 that links the preferred visible light initiators now recited in the claims. See page 17, lines 6-15.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan W. Berman whose telephone number is 571 272 1067. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SB  
11/29/06

  
Susan W Berman  
Primary Examiner  
Art Unit 1711